

Title (en)
NON-HORIZONTAL WATER EXTRACTOR

Title (de)
NICHT-HORIZONTALER WASSERABSCHEIDER

Title (fr)
EXTRACTEUR D'EAU NON HORIZONTAL

Publication
EP 3539635 A1 20190918 (EN)

Application
EP 19162339 A 20190312

Priority
US 201815918733 A 20180312

Abstract (en)
A water extractor includes a body (24) with an outer wall (26), an inlet (32), an outlet (34), a first centerline axis (A), an inner nozzle (50), an outer chamber (44), a serpentine channel (52), a pocket (16), and a boss (18). The first centerline axis extends through a center of the body, the outlet, and the inlet. The inner nozzle is co-axial with the first centerline axis. The outer chamber extends between the outer wall and the inner nozzle. The serpentine channel fluidly connects the inlet and the outer chamber. The pocket is fluidly connected to a portion of the outer chamber and is configured to collect water from the outer chamber. The boss extends from and is fluidly connected to the pocket. The boss includes a second centerline axis at an angle with the first centerline axis of approximately 10 degrees or greater.

IPC 8 full level
B01D 5/00 (2006.01); **B01D 45/00** (2006.01); **B01D 53/26** (2006.01); **B64D 13/00** (2006.01); **B64D 13/06** (2006.01)

CPC (source: EP US)
B01D 5/0075 (2013.01 - EP US); **B01D 5/0081** (2013.01 - EP US); **B01D 45/16** (2013.01 - EP US); **B01D 53/265** (2013.01 - EP US); **B64D 13/06** (2013.01 - EP US); **F01D 15/005** (2013.01 - US); **B01D 2259/4575** (2013.01 - EP US); **B64D 2013/0662** (2013.01 - EP US); **F24F 2003/144** (2013.01 - US)

Citation (applicant)
• US 7188488 B2 20070313 - ARMY JR DONALD E [US], et al
• US 201414180777 A 20140214

Citation (search report)
• [XYI] US 4681610 A 19870721 - WARNER JOHN L [US]
• [XYI] WO 9959867 A1 19991125 - ALLIED SIGNAL INC [US]
• [XY] US 2012233973 A1 20120920 - SEDILLO PATRICK M [US]

Cited by
EP3662984A1; US11154804B2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3539635 A1 20190918; **EP 3539635 B1 20220921**; US 10633099 B2 20200428; US 2019276155 A1 20190912

DOCDB simple family (application)
EP 19162339 A 20190312; US 201815918733 A 20180312